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west virginia department of environmental protection

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Division of Water and Waste Management  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304-926-0495  
Fax: 304-926-0497

Joe Manchin III, Governor  
Stephanie R. Timmermeyer, Cabinet Secretary  
[www.wvdep.org](http://www.wvdep.org)

January 17, 2008

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. James A. Rakitsky, Vice President  
Quality Distribution, Inc.  
150 E. Pennsylvania Avenue, Suite 430  
Downingtown, PA 19335

RE: Financial Assurance for  
Chemical Leaman Tank Lines, Inc.  
Kanawha County, WV  
EPA ID NO. WVR 000 001 719

Dear Mr. Rakitsky:

The West Virginia Department of Environmental Protection (WVDEP) has received your correspondence related to the cancellation of the Letter of Credit and also a "Notice of Non-Extension" by the Deutsche Bank Trust Company Americas. Please be advised that the cancellation of the financial assurance for Chemical Leaman Tank Lines, Inc. is a violation of the hazardous waste permit for the site. The Letter of Credit may be replaced but not before the new financial assurance mechanism has been approved by the WV Attorney General's Office and has been accepted as financial assurance in accordance with 40CFR164.

Additionally, the current permit requires Chemical Leaman to provide \$308,490 for financial assurance as outlined in Attachment 5 Post-Closure Plan. This amount does not reflect the inflationary increases that would have applied each year since the issuance of the permit in 1999. The Letter of Credit that is currently in place is for \$200,300 and must therefore be increased to the current level of funding. If you feel that this amount is incorrect, you may submit your request and a modification to your permit along with all documentation and an updated cost estimate. The issues related to the Soil and Groundwater Status Report dated July 12, 2007 will be addressed in separate correspondence.

Mr. James A. Rakitsky, Vice President  
January 17, 2008  
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Your immediate attention is required in this matter. If the Letter of Credit from Deutsche Bank Trust Company Americas is cancelled without a replacement mechanism being approved and accepted, this permit violation will be referred to this agency's Environmental Enforcement group.

Any questions regarding this matter should be directed to Glena Shaffer or myself at 304-926-0499 extensions 1311 or 1295, respectively.

Sincerely,

A handwritten signature in black ink, reading "Sudhir D. Patel". The signature is written in a cursive style with a large, stylized 'S' and 'P'.

Sudhir D. Patel  
Waste Program Manager

cc: Tom Fisher, Hazardous Waste Supervisor  
Mike Zeto, Chief Inspector, OEE  
Talal Fathallah, Technical Analyst III  
Kenneth Cox, USEPA Region III



**WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF WASTE MANAGEMENT  
PERMIT *for* POST-CLOSURE CARE**

**Permittee:** Chemical Leaman Tank Lines, Inc.  
102 Pickering Way  
Exton, PA 19341-0200

**Permit Number:** WVR000001719  
**EPA ID No:** WVR000001719

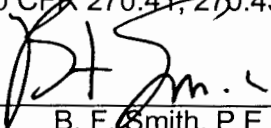
Under the authority of the Hazardous Waste Management Act (Article 18, Chapter 22, of the West Virginia Code), hereinafter called the "Act", this permit for post-closure care is being issued as a condition of Hazardous Waste Consent Order #HW 533-96 by the Division of Environmental Protection, Office of Waste Management (OWM), to Chemical Leaman Tank Lines, Inc., hereinafter called the "Permittee", for the facility located in Kanawha County, along State Route 25, between Nitro and Institute, West Virginia, at latitude 38° 23' 17" N and longitude 81° 47' 40" W.

This permit, issued pursuant to Section 11 of the Hazardous Waste Management Rule (HWMR), Title 33, Series 20, promulgated under the Act, binds the Permittee to post-closure care and the associated groundwater monitoring for those areas of the facility which may have been effected by releases of hazardous constituents originating from the pre-RCRA (Resource Conservation Recovery Act of 1976) waste disposal and RCRA remedial activities conducted at the site.

The Permittee must comply with all terms and conditions of this permit and the applicable regulations. This permit consists of the conditions contained herein (including those in any and all attachments) and the applicable provisions of HWMR and regulations contained in 40 CFR, Parts 260, 261, 262, 264, 266, 268, and 270, which have been incorporated, by reference, into the HWMR, and applicable provisions of the Act.

This permit is based on information submitted in the permit application (hereinafter referred to as the "Application"), received on April 20, and June 23, 1998, and subsequent revisions on January 19, 1999. Any inaccuracies found in this information or violations of terms or conditions of this permit may be grounds for the termination, revocation and reissuance, or modification of this permit and enforcement action. The Permittee must inform the OWM, by means of written notification to the Chief, OWM, of any deviation from or changes in the submitted information which would affect the Permittee's ability to comply with the applicable statutes, rules, regulations, or permit conditions.

This permit is effective as of July 1, 1999, and shall expire on July 1, 2009, unless suspended, revoked, revoked and reissued, or terminated (40 CFR 270.41, 270.43) or continued in accordance with 40 CFR 270.51.

  
\_\_\_\_\_  
B. F. Smith, P.E.  
Chief  
Office of Waste Management

\_\_\_\_\_  
June 30, 1999  
Date Signed

## **MODULE I STANDARD CONDITIONS**

Module I of the permit sets forth the standard conditions that are applicable to all Permittees. The regulations applicable to permitting, Parts 260 through 264, 266, 268, and 270, of Title 40, Code of Federal Regulations, have been incorporated by reference into Sections 2 through 7 and 9 through 11, respectively, of the State Legislative Rules, Title 33, Series 20, West Virginia Hazardous Waste Management Rule (HWMR).

(NOTE: The regulatory and/or statutory citations in parentheses are incorporated into the permit by reference.)

### **I-A EFFECT OF PERMIT (40 CFR §§270.30(g), 270.4 and Section 8(a) of the Act)**

Compliance with this permit during its term constitutes compliance, for purposes of enforcement, with the Hazardous Waste Management Act (Article 18, Chapter 22 of the West Virginia Code), (hereinafter, the ACT), except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR Part 268, restricting the placement of hazardous waste in, or on, the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought by the U. S. Environmental Protection Agency (US EPA) under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107, of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et. seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

### **I-B PERMIT ACTIONS (40 CFR §270.30(f))**

This permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR §§270.41, 270.42, and 270.43. This permit may also be reviewed and modified by the West Virginia Division of Environmental Protection (WV DEP), consistent with 40 CFR §270.41, to include any terms and conditions determined necessary to protect human health and the environment, and to achieve compliance with §270.32(b)(2). The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. The Permittee shall not perform any construction associated with a Class 3 permit modification request until such request is granted and the modification becomes effective.

### **I-C SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit, to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

## **I-D DEFINITIONS**

For the purpose of this Permit, terms used herein shall have the same meaning as those set forth in the Act, HWMR, and 40 CFR Parts 260 through 264, 266, 268, 270, and 279, which have been incorporated into the HWMR by reference, unless this permit specifically states otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. The following definitions also apply to this permit.

D-1 "Chief" means the Chief of the Office of Waste Management, Division of Environmental Protection;

D-2 "Days" mean except as otherwise provided herein, calendar days;

D-3 "Hazardous Constituent" means any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264;

D-4 "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

## **I-E FAILURE TO SUBMIT RELEVANT AND/OR ACCURATE INFORMATION**

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Chief, Office of Waste Management (OWM), the Permittee shall notify the Chief of such failure within seven (7) calendar days of becoming aware of such deficiency or inaccuracy. The Permittee shall submit the correct or additional information to the Chief within fourteen (14) days of becoming aware of the deficiency or inaccuracy (40 CFR, §270.30(l)(11)). Failure to submit the information required in this permit or misrepresentation of any submitted information is grounds for termination of this permit (40 CFR, §270.43).

## **I-F DUTIES AND REQUIREMENTS**

F-1 Duty to Comply (40 CFR §270.30(a))

The Permittee must comply with all conditions of this permit, except that the Permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See 40 CFR §270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

F-2 Duty to Re-apply (40 CFR §§270.30(b) and 270.10(h))

The Permittee shall submit a complete application for a new permit at least one hundred-eighty (180) days before this permit expires unless: a) the Permittee is no longer required to have a RCRA Post-Closure Care Permit; b) permission for a later date has been granted by the Chief. The Chief, shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

F-3 Permit Expiration (40 CFR §§270.13, 270.14 through 270.29, 270.50, and 270.51)

This permit and all conditions herein shall be effective for a fixed term not to exceed ten (10) years, and will remain in effect beyond the permit's expiration date only if the Permittee has submitted a timely, complete application (per 40 CFR §270.10 and applicable sections of §§270.14 through 270.29): a) to the West Virginia Division of Environmental Protection (DEP), OWM, and; b) through no fault of the Permittee, the Chief, has not issued a new permit, as set forth in 40 CFR §270.51.

F-4 Need to Halt or Reduce Activity Not a Defense (40 CFR §270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

F-5 Duty to Mitigate (40 CFR §270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impact on human health or the environment.

F-6 Proper Operation and Maintenance (40 CFR §270.30(e))

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

F-7 Duty to Provide Information (40 CFR §§270.30(h) and 264.74)

The Permittee shall furnish to the Chief, within a reasonable time designated by the Chief, any relevant information which the Chief may request to determine whether

cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Chief, OWM, upon request, copies of records required to be kept by this permit.

F-8 Inspection and Entry (40 CFR §270.30(l))

The Permittee shall allow the Chief, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location. Split samples shall be provided if requested by the Permittee or an authorized representative.

F-9 Monitoring and Record keeping (40 CFR §§270.30(j), 264.73, and 264.74)

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or application. This period may be extended, by request of the Chief, at any time.
- c. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the post-closure care period.

F-10 Reporting Planned Changes (40 CFR §270.30(l)(1))

The Permittee shall give notice to the Chief, as soon as possible, of any planned physical alterations or additions to the permitted facility.

Such notification does not waive the Permittee's duty to comply with the following:

Pursuant to §22-18-8(a) of the West Virginia Code, no person may construct or modify any facility or site for the treatment, storage, or disposal of hazardous waste without first obtaining a permit. Permitting of these alterations or additions to the facility shall be in accordance with the procedures of 40 CFR §§270.41 or 270.42 that have been incorporated by reference into Section 11 of the HWMR.

F-11 Anticipated Noncompliance (40 CFR §270.30(l)(2))

The Permittee shall give advance notice to the Chief, of any planned changes in the permitted facility, or activity, which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

F-12 Transfer of Permits (40 CFR §§270.30(l)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Chief, and only if the permit is modified, or revoked and reissued, pursuant to 40 CFR §§270.40(b), 270.41(b)(2), or 270.42(a). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 40 CFR Parts 264, 268, and 270 (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

F-13 Compliance Schedule (40 CFR §270.30(l)(5))

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Chief, no later than fourteen (14) days following each scheduled date.

F-14 Immediate Reporting (40 CFR, §264.56(d)(1) and (2))

Immediate Reporting of Emergencies to Local Authorities and the On-Scene Coordinator or the National Response Center.

- (a) Pursuant to 40 CFR, §264.56(d)(1) and (2), if the facility's emergency coordinator determines that the facility has had a release, fire, or explosion, which could threaten human health or the environment, outside the facility, he/she must report his/her findings as follows:
  - (i) If his/her assessment indicates that evacuation of local areas may be advisable, he/she must immediately notify appropriate local authorities. He/she must be available to help appropriate officials decide whether local areas should be evacuated; and



- (ii) He/she must immediately notify either the government official designated as the On-scene Coordinator for that geographical area, (in the applicable regional contingency plan under 40 CFR, Part 1510) or the National Response Center (1-800-424-8802).
- (b) The report must include:
- (i) Name and telephone number of the reporter;
  - (ii) Name, address, and telephone number of the facility;
  - (iii) Date, time and type of incident (e.g., release, fire);
  - (iv) Name and quantity of material(s) involved, to the extent known;
  - (v) The extent of injuries, if any; and
  - (vi) The possible hazards to human health or the environment, outside the facility.

F-15 Twenty-four (24) hour Reporting (40 CFR §§270.30(l)(6) and 270.33)

The Permittee shall report to the Chief, any noncompliance which may endanger human health or the environment. Any such information shall be reported orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances.

This report shall include the following:

- a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and,
- b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
  - (i) Name, address, and telephone number of the owner or operator;
  - (ii) Name, address, and telephone number of the facility;
  - (iii) Date, time, and type of incident;
  - (iv) Name and quantity of material(s) involved;
  - (v) The extent of injuries, if any;

- (vi) An assessment of actual or potential hazard(s) to the environment and human health outside the facility, where this is applicable, and;
- (vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided to the Chief, within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Chief, waives the requirement. Upon waiver of the five (5) day requirement, the Permittee shall submit a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

**F-16 Other Noncompliance (40 CFR §270.30(l)(10))**

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within fifteen (15) days of the Permittee becoming aware of the noncompliance. The reports shall contain the information listed in Condition I-F-15.

**F-17 Submittal of Reports or Other Information (40 CFR §§270.30(l)(7), (8), (9), and 270.31)**

All reports or other information required to be submitted pursuant to this permit shall be sent to:

Chief, Office of Waste Management  
1356 Hansford Street  
Charleston, WV 25301  
**ATTN: Hazardous Waste Management Section**

**I-G SIGNATORY REQUIREMENT**

- G-1 All reports or other information submitted to or requested by the Chief, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §270.11.
- G-2 Changes to Authorization. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or because a new individual or position has responsibility for the facility's compliance with environmental laws and permits, a new authorization satisfying the requirements shall be submitted to the Chief prior to or together with any reports,

information, or applications to be signed by an authorized representative (40 CFR §270.11(c)).

#### **I-H CONFIDENTIAL INFORMATION**

In accordance with Section 11.7 of the HWMR, any information submitted to the Chief, Office of Waste Management, pursuant to this permit, may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed in Section 11.7.b and 11.7.c of the HWMR.

If no claim is made at the time of submission, the Office of Waste Management shall make the information available to the public. If a claim is asserted, the information shall be treated in accordance with the procedures in Section 11.7 of the HWMR.

#### **I-I DOCUMENTS TO BE MAINTAINED AT THE FACILITY**

The Permittee shall maintain and make available, at the facility, until the post-closure care period is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to these documents.

I-1 This permit with all attachments;

I-2 Operating Record, as required by 40 CFR §264.73, and this permit;

The following information must be recorded, as it becomes available, and maintained in the operating record until completion of the post-closure care period.

- a. Summary reports and details of all incidents that require implementation of the contingency plan as specified in 40 CFR §264.56(j).
- b. Records and results of inspections as required by 40 CFR §264.15(d) [this data needs to be kept for only three (3) years].
- c. Monitoring, testing, or analytical data, and corrective action where required by 40 CFR §264, Subpart F.
- d. All post-closure cost estimates under 40 CFR §264.144.

I-3 Corrective action reports and records, if any, must be maintained for at least three (3) years after all corrective action activities have been completed.

#### **I-J DISCLOSURE IN DEED**

Pursuant to Section 21 of the Act and Section 12 of the HWMR, the Permittee shall make a notation on the deed or lease to the facility property, or on some other instrument that is normally examined during the title search, that will, in perpetuity, notify

any potential purchaser that the land has been used to manage hazardous waste. Such disclosure shall describe the location upon said property, identifying the type and quantity of hazardous waste and the method of storage, treatment, or disposal with respect to such waste.

## **MODULE II GENERAL FACILITY CONDITIONS**

### **II-A DESIGN AND OPERATION OF FACILITY**

The Permittee shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste and/or hazardous waste constituents to air, soil, or state waters (including surface and groundwater) which could threaten human health or the environment as required by 40 CFR §264.31.

### **II-B GENERAL SAMPLING AND ANALYTICAL REQUIREMENTS**

- B-1 The Permittee shall maintain calibrated functional instruments, verify the integrity of sampling and analysis by documentation, and perform correct calculations. Throughout all sampling and analytical activities, the Permittee shall use EPA approved procedures for sampling, sample chain-of-custody, analytical and quality assurance/quality control (QA/QC).
- B-2 Documentation of monitoring information shall include:
- a. The date, exact place, and time of sampling or measurement;
  - b. Names of company and individuals who performed the sampling or measurement;
  - c. Dates analyses were performed;
  - d. Names of laboratory and individuals who performed the analyses;
  - e. Analytical method used; and
  - f. Results of such analyses.
- B-3 The Permittee shall record this data in the facility operating record as required by 40 CFR 264.73(b)(6) and permit condition I-1-2.c.
- B-4 For purposes of demonstrating compliance with this permit and the Act, the Permittee shall not use laboratory data generated by a laboratory which is not certified under the West Virginia laboratory certification program as required by 22-1-15 of the W.Va. Code and Title 47, Series 32 Rule promulgated under this statutory provision.

### **II-C GENERAL INSPECTION REQUIREMENTS**

- C-1 The Permittee must inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to:
- a. release of hazardous waste constituents to the environment;
  - or;
  - b. a threat to human health.

The Permittee must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment (40 CFR §264.15(a)).

- C-2 The Permittee must follow a written inspection schedule as outlined in Attachment 1.
- C-3 The Permittee must remedy any deterioration or malfunction of equipment or structures discovered by an inspection as required by 40 CFR §264.15(c).
- a. Where a hazard is imminent or has already occurred, the Permittee must take remedial action immediately.
  - b. The Permittee shall, within fifteen (15) days of an inspection, remedy any deterioration or malfunction of equipment or structure to ensure that the problem does not lead to an environmental or health hazard.
  - c. If the remedial action is expected to take more than fifteen (15) days, the Permittee shall, in addition to the immediate response specified in II-C-3a, submit a schedule for remedial action to the Chief for approval.
- C-4 The Permittee shall record these inspections and their results in an inspection log (40 CFR 264.15(d)), and the facility operating record as required by permit condition I-I-2.b.

## **II-D PERSONNEL TRAINING**

The Permittee shall conduct personnel training as required by 40 CFR §264.16. The Permittee shall maintain training documents and records as required by 40 CFR §264.16.(d) and (e).

## **II-E PREPAREDNESS AND PREVENTION**

### **E-1 Required Equipment**

At a minimum, the Permittee shall equip the facility with the equipment as set forth in the contingency plan, Attachment 3, as required by 40 CFR §264.32.

### **E-2 Testing and Maintenance of Equipment**

The Permittee shall test and maintain the equipment specified in the previous Permit Condition and in Attachment 3 as necessary to assure its proper operation in time of emergency as required by 40 CFR §264.33. The record of tests and maintenance shall be part of the facility operating record (40 CFR 264.73(b)(6)).

### **E-3 Access to Communications or Alarm System**

The Permittee shall maintain access to the communications or alarm system as required by 40 CFR §264.32.

### **E-4 Required Aisle Space**

At a minimum, the Permittee shall maintain aisle space as required by 40 CFR §264.35 to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency.

## **II-F CONTINGENCY PLAN**

### **F-1 Implementation of Plan**

The Permittee shall immediately carry out the provisions of the approved contingency plan, as set forth in Attachment 3, and follow the emergency procedures described by 40 CFR §264.56 whenever there is an imminent or actual emergency situation (which includes release of hazardous waste or constituents, a fire, or explosion), which threatens or could threaten human health or the environment.

### **F-2 Copies of Plan**

The Permittee shall comply with the requirements of 40 CFR §264.53 in regards to contingency plan distribution.

### **F-3 Amendments to Plan**

The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR §264.54.

### **F-4 Emergency Coordinator**

Emergency Coordinators have been identified in the Contingency Plan (Attachment 3). Permittee shall comply with the requirements set forth in 40 CFR §264.55 and 264.56 regarding the emergency coordinator.

## **II-G GENERAL POST-CLOSURE REQUIREMENTS**

### **G-1 Performance Standard**

The Permittee shall perform post-closure care in a manner that controls, minimizes or eliminates, to the extent necessary, to protect human health and the environment, post-closure escape of hazardous constituent, leachate, contaminated run-off, or hazardous decomposition products to the waters of the State.

### **G-2 Amendment to Post-Closure Plan**

The Permittee shall amend the Post-Closure Plan in accordance with 40 CFR §264.118(d) whenever necessary.

### **G-3 Certification of Completion of Post-Closure Care**

Within sixty (60) days of completion of the established post-closure care period, Permittee must submit to the Chief, certification both by the Permittee and by an independent registered professional engineer, that the post-closure care has been performed in accordance with the specifications in the approved Post-Closure Plan and the terms and conditions of this permit as required by 40 CFR §264.120.

## **II-H COST ESTIMATE FOR POST-CLOSURE**

### **H-1 Cost Estimates**

- a. Pursuant to 40 CFR §264.144, the Permittee shall have a detailed written estimate, in current dollars, of the cost of providing post-closure care in accordance with the approved post-closure plan, Attachment 5.
- b. The estimate must be based on the costs to the owner or operator of hiring a third party to provide post-closure care. A third party is a party who is neither a parent nor a subsidiary of the owner or operator.
- c. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under permit condition III-B-1.

### **H-2 Annual Adjustment (§264.144(b))**

During the active life of the facility, the Permittee must adjust the cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument used to comply with the requirements of 264.145. If using the financial test or corporate guarantee, the cost estimate must be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of updated information to DEP.

### **H-3 Adjustment for Changed Conditions**

The Permittee must revise the cost estimate whenever there is a change in the facility's post-closure plan as required by 264.144(c).

### **H-4 Availability**

The Permittee must keep at the facility the latest cost estimate as required by 264.144(d).

## **II-I INCAPACITY OF OWNER/OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS**

The Permittee must notify the Director, Division of Environmental Protection, by certified mail, of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the Permittee as debtor, within ten (10) days after commencement of the proceeding, as required by 40 CFR §264.148.

## **II-J FINANCIAL ASSURANCE REQUIREMENTS**

The Permittee shall maintain compliance with 40 CFR §264, Subpart H by providing financial assurance, as required by 40 CFR §264, Subpart H, in at least the amount of the cost estimate required by Permit Condition II-H.



## **II-K LIABILITY REQUIREMENTS**

The Permittee shall comply with the requirements of 40 CFR §264.147 and the documentation requirements of 40 CFR §264.147, including the requirements to have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs.

## **II-L SECURITY**

The Permittee shall comply with the security provisions of 40 CFR §264.14.

## **II-M REQUIRED NOTICES**

The Permittee shall comply with the requirements of 40 CFR §264.12(c) and 264.119.

## **II-N CONSIDERATIONS UNDER STATE LAW**

### **N-1 Groundwater Protection Act**

The Director, Division of Environmental Protection, under the provisions of the Groundwater Protection Act (Article 12, Chapter 22 of the West Virginia Code), has certified the groundwater regulatory program of the Office of Waste Management (OWM), Hazardous Waste Management, and thereby authorized OWM to be a groundwater regulatory agency for the purposes of Article 12.

#### **a. Annual Fee**

The Permittee shall pay the annual groundwater protection fund fee in accordance with the rules codified as Title 47, Series 55, that were promulgated under the Groundwater Protection Act. Pursuant to Section 9(a) of this Act, failure to remit groundwater protection fund fees may result in withdrawal or withholding of groundwater certification and, subject the Permittee to the penalties outlined in West Virginia Code §22-12-10.

#### **b. Groundwater Protection Plan**

The rules, Title 47, Series 58, promulgated under the Groundwater Protection Act, establish a series of practices which must be followed by persons subject to regulation by OWM under the Groundwater Protection Act. Pursuant to Section 4.12.3 of 47 CSR 58, the Groundwater Protection Plan (GPP) must be available on site at all times.

### **MODULE III POST-CLOSURE CARE**

#### **III-A AREA IDENTIFICATION**

The area of the facility east of the terminal building and bordering W.Va. State Route 25, as depicted in Attachment 5, subject to post-closure care, is composed of the following three subsets:

- A-1 Buried drum excavation area of approximately 0.10 acres where almost 9000 gallons of waste originating from tanker truck residuals was released prior to and during the drum excavation and which an undetermined amount of hazardous constituents escaping the excavation were released to the soils and may have subsequently reached groundwater. The depth of these excavations may have approached groundwater. These excavations were backfilled with clean soil taken from the hillside.
- A-2 Bio-remediation area of approximately 0.56 acres where undetermined amounts of hazardous constituents were released to the environment over a two years duration from the eight (8) bio-remediation cells.
- A-3 The far easterly portion of the permitted area consisting of approximately 0.11 acres where approximately 2200 cubic yards of the treated soils meeting the land disposal restrictions of 40 CFR 268 have been stock piled on a plastic liner. The stock pile has been seeded to reduce erosion and a silt fence has been placed around the stock pile to control run-off. Based on an OWM site survey for permitting purposes and the initial permit application submittal, the treated soil stock pile has little or no provision to control run-on from the hillside. The permit addresses this inadequacy in Permit Condition III-C.

#### **III-B POST-CLOSURE CARE PERIOD**

- B-1 In accordance with 40 CFR 264.117(a)(1), the post-closure care period will continue for thirty (30) years after the date of completion of closure and shall consist of the following;
  - (a) Monitoring and reporting in accordance with this permit, and
  - (b) Inspection and maintenance of monitoring wells and waste containment systems in accordance with this permit.
- B-2 In accordance with 40 CFR 264.117(a)(2), the Chief may, pursuant to the permit modification procedures in Section 11 of HWMR and 40 CFR 270;
  - (a) Shorten the post-closure care period if he/she finds that the reduced period is sufficient to protect human health and the environment, or

- (b) Extend the post-closure care period if he/she finds that the extended period is necessary to protect human health and the environment.

### **III-C SCHEDULE OF COMPLIANCE**

- C-1 Within ninety (90) days following the issuance date of this permit, the Permittee shall have installed the controls to minimize the run-on to the treated soil stock pile area which are described in Attachment 5.
- C-2 Certification of Compliance: No later than fourteen (14) days following the compliance date set forth in III-C-1, the Permittee shall notify the Chief, by certified mail, or hand delivery, in a letter signed by the Permittee and a registered professional engineer that the run-on control was installed in compliance with this permit.

### **III-D INSPECTIONS**

The Permittee shall inspect the components, structures, and equipment at the site at least monthly in accordance with Attachment 1.

### **III-E POST-CLOSURE PROCEDURES**

- E-1 The Permittee shall maintain the groundwater monitoring system in accordance with this permit.
- E-2 The Permittee shall maintain a vegetative cover over the area of stockpiled treated soil.
- E-3 The Permittee shall construct, operate, and maintain the run-on control system for the stock pile area to adequately divert stormwater from hillside running on to stockpile from at least a 25-year storm.
- E-4 The Permittee shall maintain the run-off control system of the stockpile area.

### **III-F POST-CLOSURE PERMIT MODIFICATIONS**

The Permittee must request a permit modification to authorize a change in the approved Post-Closure Plan. This request must be in accordance with the applicable requirements of 40 CFR 270, and must include a copy of the proposed amended Post-Closure Plan for approval by the Chief.

The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan, or other events occur during the active life of the facility that affect the approved plan. The Permittee must submit a

written request for a permit modification at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the Post-Closure Plan (40 CFR 264.118(d)).

## **MODULE IV GROUNDWATER MONITORING**

### **IV-A AREA IDENTIFICATION**

The groundwater beneath the area to the east of the terminal building and bordering State Route 25 may have been effected by the releases of hazardous constituents originating from pre-RCRA waste disposal and RCRA remedial activities conducted at the site. A map depicting the suspect area and the proposed monitoring well locations can be found in Attachment 4.

### **IV-B SCHEDULES OF COMPLIANCE (40 CFR 270.33)**

#### **B-1 Groundwater Monitoring Well Installation:**

Within ninety (90) days following the issuance date of this permit, the Permittee shall have installed the six (6) groundwater monitoring wells in accordance with the specification contained in this permit.

#### **B-2 Certification of Compliance:**

No later than fourteen (14) days following the compliance date set forth in IV-B-1, the Permittee shall notify the Chief, by certified mail, or hand delivery in a letter signed by the Permittee and a registered professional engineer that the six monitoring wells were installed in compliance with this permit.

#### **B-3 Corrective Action (Contingent):**

In accordance with 40 CFR 264.99(h), if the evaluation under Permit Condition IV-C-4-d, triggers the need for corrective action, the Permittee shall, within one-hundred eighty (180) days, submit to the Chief, an application for a permit modification to establish a corrective action program meeting the criteria of 40 CFR 264.100.

### **IV-C MONITORING REQUIREMENTS**

#### **C-1 Points of Compliance and Compliance Period**

- a. Monitoring wells MW-102 through MW-106 shall serve as the downgradient compliance points for the waste management area. The upgradient monitoring well MW-101 shall serve as background.
- b. Pursuant to 40 CFR 264.96 the compliance period shall last until September, 2004. If the Permittee is required to perform further remedial activities the compliance period will last through the corrective action period and extend until the Permittee can demonstrate that the groundwater protection standard expressed in permit condition IV-C-2 has not been exceeded for a period of three (3) consecutive years.

## C-2 Groundwater Protection Standard

The Permittee shall monitor groundwater for the indicator parameters conductivity, pH and TOC and to determine whether the waste management area is in compliance with the following groundwater protection standards which have been listed in Appendix A of Title 46, Series 12, of the State Rules promulgated under the Groundwater Protection Act.

CONSTITUENT	MAXIMUM CONCENTRATION (IN MICROGRAM PER LITER)
<b>METALS</b>	
Lead (total)	15
<b>ORGANICS</b>	
Benzene	5
Carbon tetrachloride	5
Chlorobenzene	100
Dichlorobenzene-para	75
Dichlorobenzene-Ortho and/or meta	600
1-2 Dichloroethane	5
1-1 Dichloroethylene	7
Methylene Chloride	5
Bis [2-ethylhexyl] phthalate (DEHP)	6
Ethylbenzene	700
Styrene	100
Tetrachlorethylene	5
Trichlorobenzene	70
1-1-1 Trichloroethane	200
1-1-2 Trichloroethane	5
Trichloroethylene	5
Vinyl Chloride	2

## C-3 Monitoring Program Procedures

- a. The Permittee shall comply with the procedures contained in 47 CSR 60 for monitoring well installation and closing.

- b. The Permittee shall comply with the procedures contained in Attachment 4 for: 1) determining groundwater elevations, 2) sampling, 3) sample preservation, 4) sample chain-of-custody, 5) analysis, 6) quality assurance/quality control (QA/QC), and 7) data evaluation.
- c. For those analytical parameters not covered in the permit application and Attachment 4 (Pb, TOC, etc.) the Permittee shall use EPA approved methods for sample preservation and analysis.

#### C-4 Monitoring Program Evaluations

The Permittee shall determine groundwater quality as follows:

- a. Quarterly, for the first six (6) consecutive quarters, the Permittee shall determine groundwater elevations at each sampling event and collect, preserve and analyze **duplicate** groundwater samples from the monitoring wells specified in permit condition IV-C-1a for the indicator parameters and constituents specified in IV-C-2 in accordance with the procedures specified in IV-C-3.
- b. After obtaining the initial database under permit condition IV-C-4a, the Permittee shall determine groundwater quality on a **semi-annual** frequency. Duplicate samples from each monitoring well shall be taken for indicator parameters specified in IV-C-2. Single samples from each well shall be taken for constituents specified in IV-C-2 with one (1) field blank and one (1) blind duplicate per sampling event as per Attachment 4.
- c. To assure sample integrity and defensible data, the Permittee shall document sample chain-of-custody from initial sampling to the final laboratory determination.
- d. Annually, the Permittee shall apply statistical tests to the data using the Parametric Analysis of Variance as per Attachment 4.
  - i. Pursuant to 40 CFR 264.98(g)(2), if the statistical tests applied to the monitoring well data indicate that a significant increase (or decrease in case of pH) of any indicator parameter or constituent or any constituent exceeding the maximum concentration allowed in Permit Condition IV-C-2 has occurred, the Permittee shall immediately sample and analyze for the list of constituents in Appendix IX of 40 CFR 264. (in accordance with Section 7.5.c.1 of HWMR, this sampling and analysis for the constituents of Appendix IX need only be repeated once in every five (5) years) and;

- ii. Pursuant to 40 CFR 264.99(h), Within one-hundred eighty (180) days, the Permittee shall submit, to the Chief, an application for a permit modification to establish a corrective action program meeting the criteria of 40 CFR 264.100.

#### IV-D REPORTING AND RECORD KEEPING REQUIREMENTS

- D-1 The Permittee shall enter all monitoring, testing, analytical, and statistical data obtained, pursuant to Permit Condition C-4a, b, c, and d, into the Operating Record.
- D-2 Quarterly, for the first six (6) consecutive quarters, the Permittee shall submit a report to the Chief, on the results obtained pursuant to Permit Condition C-4a and c in accordance with the schedule in Permit Condition IV-D-5.
- D-3 After obtaining the initial database during the first six (6) consecutive quarters, the Permittee, on a semi-annual frequency, shall submit a report to the Chief, on the results obtained pursuant to Permit Condition IV-C-4b and c in accordance with the schedule specified in Permit Condition IV-D-5.
- D-4 Annually, the Permittee shall submit a report, to the Chief, on the results obtained pursuant to Permit Condition IV-C-4b, c, and d, in accordance with the schedule in Permit Condition IV-D-5.
- D-5

<b>SAMPLING PERIOD</b>	<b>REPORT DUE DATE</b>
First Quarter	May 15
Semi-Annual or Second Quarter	August 15
Third Quarter	November 15
Annual or Fourth Quarter	February 15



## LIST OF PERMIT ATTACHMENTS

The following material has been compiled from the Permittee's permit application and is part of this permit:

- |               |   |
|---------------|---|
| Attachment 1: | Inspection Schedule (pages 1-1 through 1-3)     |
| Attachment 2: | Training Outline (page 2-1)                     |
| Attachment 3: | Contingency Plan (pages 3-1 through 3-20)       |
| Attachment 4: | Groundwater Monitoring (pages 4-1 through 4-17) |
| Attachment 5: | Post-Closure Plan (pages 5-1 through 5-6)       |

**ATTACHMENT 1**  
**INSPECTION SCHEDULE**

I-2a

Inspection Plan:

Inspections will be conducted monthly at three areas (former drum and soil excavation, former biocells, and treated soil stockpile) during the post closure care period. All inspections will be recorded on an inspection sheet (a sample sheet is included on the following page) bound in a log book, which will be kept on-site by the facility manager. Monthly inspections of the site have been designated due to the absence of site activity at the three areas and the limited potential of the conditions at the site changing over a lesser period of time. The following items, as applicable, will be included during the site inspections as part of the site inspection plan:

1. *Security control devices:* The chain link fence along the eastern and southern property boundary of the facility will be inspected with a newly installed chain link fence which will be installed along the western border of the former drum and soil excavation to Route 25. In addition, "Danger - Unauthorized Personnel Keep Out" signs will be posted on the fencing and inspected for legibility.
2. *Erosion damage:* The surface of the three areas will be inspected for the presence of soil erosion. All erosion features will be noted in the log book.
3. *Cover settlement, subsidence, and displacement:* Since all three areas have been compacted, settlement, subsidence, and/or displacement are not expected to occur. However, if the grade level of any of the three areas should subside, the location and dimensions of the subsided area will be recorded in the log book.
4. *Vegetative cover condition:* The length, type, and general health of vegetation will be recorded in the log book with any locations lacking or stressed vegetation. All deep rooted plants will be noted for removal.

5. *Integrity of run-on and run-off control measures:* The integrity of the silt fencing, soil berms, and run-on control ditches will be inspected for continuity and effectiveness. These conditions will be recorded in the log book and maintained as necessary. The silt fencing will be removed once the surface stabilizes.
6. *Cover drainage system functioning:* The surfaces will be assessed for drainage by the presence of any standing water or erosional features. These features will be recorded in the log book.
7. *Leachate collection/detection and removal system:* Not Applicable.
8. *Gas venting system:* Not Applicable.
9. *Well condition:* Each well will be inspected to ensure that the well caps are secure, the well is locked, and that no external or internal damage have occurred to either the exterior casing, internal casing, driveover cover, or protective bollards.
10. *Benchmark integrity:* Not Applicable.

**CHEMICAL LEAMAN TANK LINES, INC.  
INSTITUTE, WEST VIRGINIA  
MONTHLY INSPECTION REPORT**

Inspection Date: \_\_\_\_\_

Inspection Time: \_\_\_\_\_

Inspector Name: \_\_\_\_\_

	Yes	No	Action/Notes
1. Security control devices:			
a. Chain link fence inspected	_____	_____	_____
b. "Danger - Unauthorized Personnel Keep Out" signs legible	_____	_____	_____
2. Erosion damage			
a. Any soil erosion evident	_____	_____	_____
3. Cover settlement, subsidence, and displacement			
a. Any evidence of the above	_____	_____	_____
4. Vegetative cover condition			
a. Are deep rooted plants evident	_____	_____	_____
b. Note types of vegetation present	_____	_____	_____
c. Does the area require mowing	_____	_____	_____
5. Integrity of run-on and run-off control measures			
a. Is silt fence intact/functional	_____	_____	_____
b. Are soil berms intact/functional	_____	_____	_____
c. Are run-on control ditches free of sediment/functional	_____	_____	_____
6. Cover drainage system functioning			
a. Is standing water present	_____	_____	_____
b. Additional erosion features not covered under Item 2 above	_____	_____	_____
7. Well condition			
a. Are well caps secure	_____	_____	_____
b. Are wells locked	_____	_____	_____
c. Damage to casing or driveover	_____	_____	_____

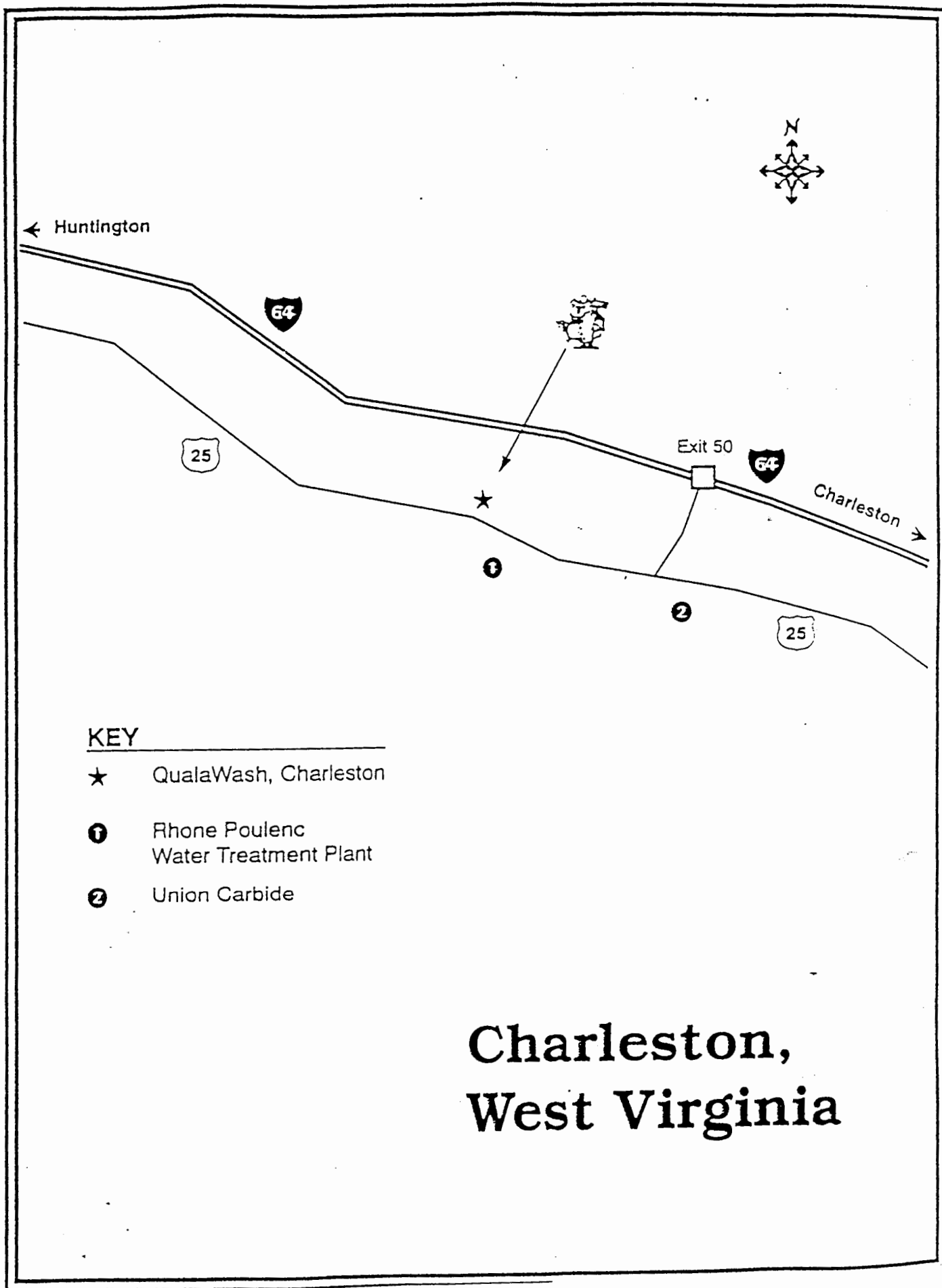
**ATTACHMENT 2**  
**TRAINING OUTLINE**

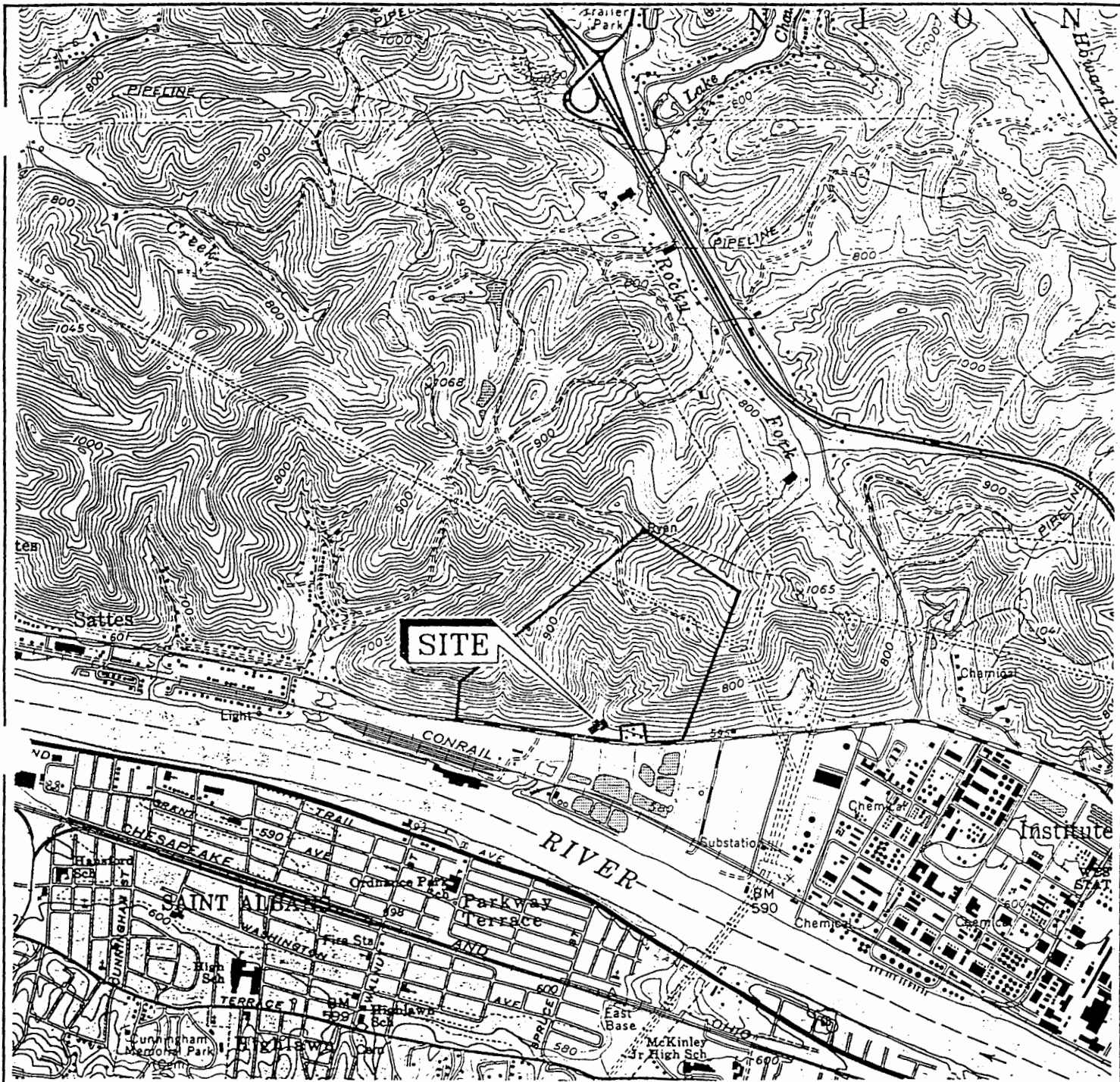
## **Section H: Personnel Training**

All persons whose job responsibilities will include well installations or groundwater monitoring within the secure former biocell area will be trained on an annual basis according to the guidelines of 29 CFR 1910.120(e) Hazardous Waste Operations and Emergency Response (known as 40-Hour HAZWOPER Training) with the necessary 8-hour annual refresher training.

**ATTACHMENT 3**  
**CONTINGENCY PLAN**







NOTE: BASE MAP FROM THE SAINT ALBANS, W. VA, 7.5 MINUTE USGS TOPOGRAPHIC QUADRANGLE.  
(PHOTOREVISED 1971 AND 1976)

2000' 0 2000'  
SCALE IN FEET

### LEGEND

— PROPERTY BOUNDARY



QUADRANGLE LOCATION

CHEMICAL LEAMAN TANK LINES, INC.

INSTITUTE, W.VA

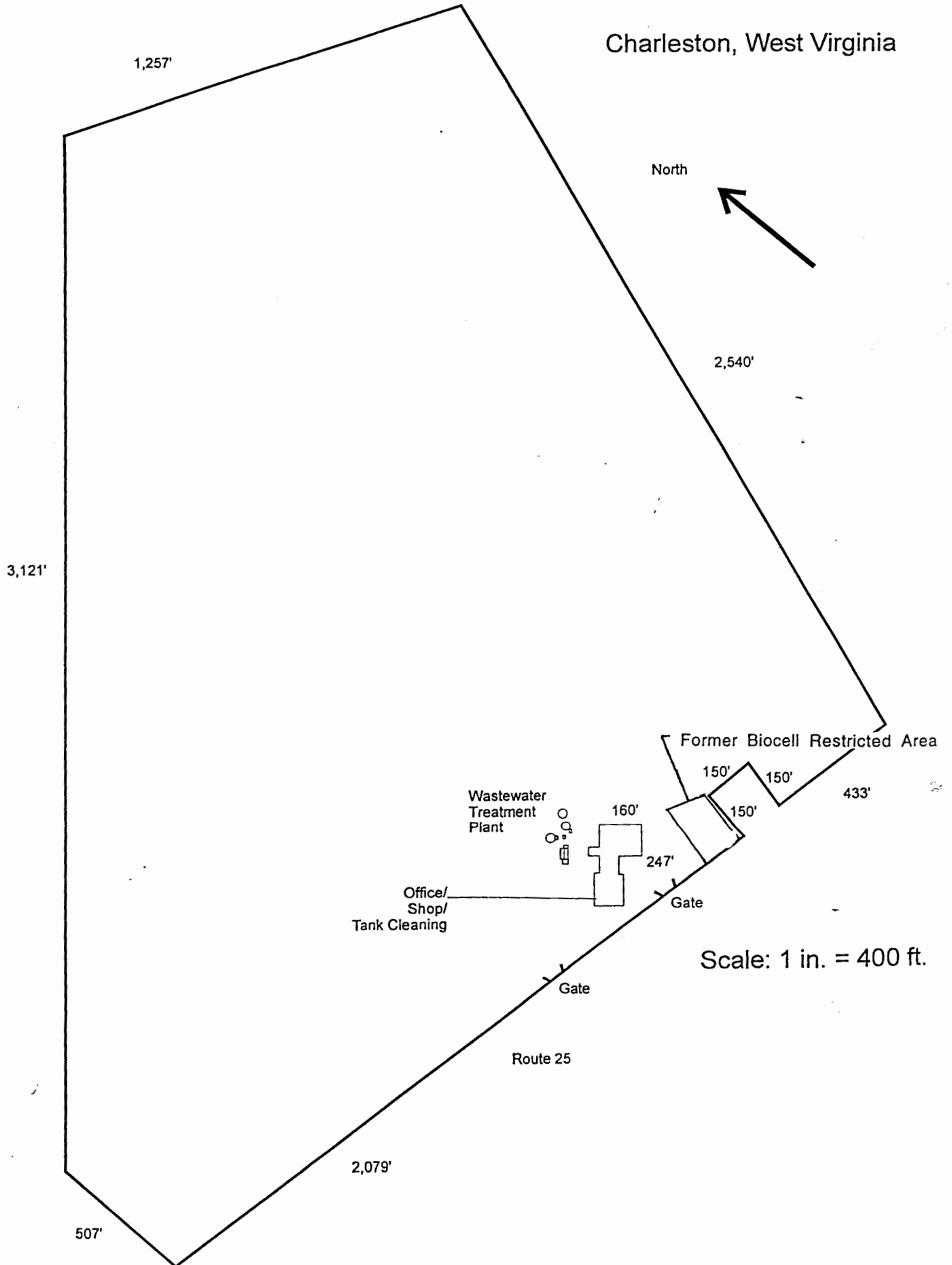
### SITE LOCATION MAP

drawn RAN	checked TNA	approved	figure no.
date 01/13/98	date 11/14/98	date	12B-2
job no. 01-1408-00-1140-000	file no. 01140-001-A		

**SAIC**  
An Employee Owned Company

**R.E. Wright Inc.**  
A Subsidiary of Science Applications  
International Corporation

Charleston, West Virginia



# QSI

## Contingency Plan

Owner or Operator: Quala Systems, Inc.  
Address and Telephone: 102 Pickering Way, Exton, PA 19341-0200  
(610) 363-4400

Facility Address and Telephone: Route 25  
Institute, WV 25112  
(304) 722-1400

Facility Site Plan: (See Attached Plans)

### 1.0 Purpose

This plan is designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned, sudden or non-sudden spill/release of hazardous materials, hazardous waste, or hazardous waste constituents to air, soil, or surface water.

### 2.0 Emergency Coordinator

The Facility Manager is the Emergency Coordinator for the facility. The Emergency Coordinator is responsible for coordinating all emergency response measures. The Emergency Coordinator will be thoroughly familiar with all aspects of this Contingency Plan, all operations and activities at the facility, the location and characteristics of wastes handled, the location of all records, and the facility layout.

In the absence of the Facility Manager, a designated alternate will act as the on-site coordinator, until the Facility Manager arrives on the scene. Individuals who may act as an alternate are: the Tank Cleaning Supervisor, the Maintenance Supervisor, or the Tank Cleaning Leadman. Each designated alternate will be thoroughly familiar with the contents of the facility Contingency Plan.

## QSI

Names, addresses, and home telephone numbers of qualified Emergency Coordinators are:

	<u>Name</u>	<u>Home Phone</u>	<u>Pager</u>
Primary:	Ron Baker 223 Hayes Avenue Charleston, WV 25314	(304) 345-5537	(888) 897-4534
Alternates:	Jeff Comer 4724 Big Tower Road Charleston, WV 25313	(304) 744-0935	N/A
	Tim Perry 4817 Hickory Woods Drive Greensboro, NC 27410	(910) 665-1695	(800) 910-8789

### 3.0 Implementation

Whenever there is a fire, explosion, or any unplanned sudden or non-sudden spill/release of hazardous materials, hazardous waste, or hazardous waste constituents to air, soil, or surface water at the facility, the provisions of the plan must be carried out immediately.

### 4.0 Contingency Plan Modifications

This Contingency Plan will be reviewed and immediately amended whenever one of the following occurs:

- 1) Applicable regulations are revised;
- 2) The plan fails in an emergency;
- 3) The design, construction, operation, or maintenance of the facility changes;
- 4) The list of emergency coordinators changes; or
- 5) The list of emergency equipment changes.

### 5.0 Periodic Drills

Periodic drills shall be held to assess the effectiveness of this Contingency Plan at the discretion of the Facility Manager, Safety Manager, and/or Environmental Manager. The drills should be coordinated with the appropriate local emergency response agencies, including the fire and police departments.

# QSI

## 6.0 Emergency Procedures

Whenever there is an imminent or actual emergency situation, the Emergency Coordinator must immediately:

- 1) Activate the Alarm System to notify all facility personnel;
- 2) Notify Regional Manager, Tim Perry;
- 3) If outside assistance is required, notify appropriate Local or State agencies with the designated response role;
- 4) Notify all tenants (if present) on site; and
- 5) Take action specified for type of incident.

## 7.0 Emergency Actions

Specified actions to be taken in response to various incidents are:

### Fire

- 1) Sound the Fire Alarm;
- 2) Notify the Fire Department;
- 3) Initiate Facility Evacuation Plan;
- 4) Move mobile equipment (trucks, cars, forklifts, cargo tanks) away from the fire area -- (make certain that equipment does not block Fire and Emergency vehicle access to the facility);
- 5) Employ facility fire fighting equipment to contain or extinguish fire;
- 6) Keep spectators at a safe distance from the area; and
- 7) Have qualified people attempt to reduce or stop the release of material.

### Explosion

Follow the same sequence as for fire.

**Spills/Release of hazardous materials and hazardous waste to air, soil, or surface water (sudden or non-sudden)**

- 1) Sound the Emergency Alarm;

# QSI

- 2) Have qualified people attempt to reduce or stop the release of material;
- 3) Evacuate all personnel and spectators to a safe distance from the area;
- 4) If material is on the ground, attempt to contain it by diking;
- 5) In the event of a release (spill) to the ground or surface waters, the Emergency Coordinator will contact:
  - (a) one of the following spill response/clean-up contractors; or
  - (b) contact the Safety Manager for assistance in choosing/contacting one of the following spill response/clean-up contractors:
    - a) Weavertown Environmental Group  
P.O. Box 713  
Charleston, WV 25323  
800-746-4850  
304-346-0160
    - b) Clean Harbors, Inc.  
3260 Homeward Way  
Fairfield, OH 45014  
513-874-5888
    - c) OHM Remediation Services Corporation  
1508 Fauver Road  
Glen Allen, VA 23060  
804-262-0079

In the event that the Emergency Coordinator can not contact a spill response contractor or the Safety Manager, the Environmental Manager shall be contacted;

- 6) If toxic vapor, fume, or gas is released, keep everyone upwind;
- 7) If an explosion appears imminent, initiate Facility Evacuation Plan;
- 8) If material is soaking into the ground, cordon off the area, and restrict access to only those engaged in cleanup operations; and
- 9) For any oil spill, or hazardous material or substance spill in excess of the Reportable Quantity, the Emergency Coordinator is to notify:

West Virginia Department of Environmental Protection  
(800) 642-3074

# QSI

## Incident Involving the Former Biocell Restricted Area

- 1) Follow the same sequence as for fire, explosion or spill/release depending on the nature of the incident.
- 2) Contact the Post-Closure Contact, Roy Peterson of EnviroPower, Inc. at 610-363-4498.

The Former Biocell Restricted area is not to be entered unless the person is trained according to the Post-Closure Plan personnel training requirements and familiar with the Former Biocell Post-Closure Plan. The QSI facility manager is to retain a copy of the Post-Closure Care Plan and a key to the gate which limits access to the area.

Whenever there is a spill/release, fire, or explosion, the Emergency Coordinator must immediately identify the character, source, amount, and extent of any released material. The Emergency Coordinator must notify the Regional Manager. The Regional Manager will notify the Corporate Safety Manager, and the Corporate Environmental Manager.

The Emergency Coordinator must assess the possible hazards to human health or the environment. The Emergency Coordinator must consider both direct and indirect effects of any toxic, irritating, or asphyxiating gasses or the effects of any hazardous surface water runoff from water or chemical agents used to control a fire or heat induced explosion.

For all spills of hazardous waste and hazardous substances that exceed a reportable quantity, or if it is determined that there has been a spill or release which could threaten human health or has reached surface water, the Emergency Coordinator must report the findings as follows:

- 1) Notify these Federal Agencies:

The National Response Center	(800) 424-8802
USEPA Region 3 (Philadelphia)	(215) 597-9800

- 2) Notify these State and Local Agencies:

State Police Department	(304) 746-2100
West Virginia Division of Environmental Protection	(800) 642-3074



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- 3) If evacuation of the local area is advisable, notify the appropriate local authorities:

Fire Department	911 or (304)755-0777
Police	911 or (304)357-0191
Ambulance	911 or (304)357-0191
Hospital	911 or (304)766-3601

Report to the above agencies the following:

- 1) Name and telephone number of the reporter;
- 2) Name and address of the facility;
- 3) Name, address, and EPA ID Number (WVD000495655 for QSI) of the generator;
- 4) Time and type of incident (e.g., spill, release, fire, etc.);
- 5) Name and quantities of materials involved to the extent known;
- 6) Extent of injuries, if any;
- 7) The estimated quantity and disposition of any recovered material; and
- 8) The possible hazards to human health or the environment, outside the facility.

During the emergency, the Emergency Coordinator must take all reasonable measures to ensure that fires, explosions, and releases do not occur, or spread to the hazardous waste at the facility. These measures must include stopping processes and operations, or isolating containers. There must also be monitoring for leaks, pressure buildup, gas generation, or ruptures in valves, pipes and other equipment.

### 8.0 Post Emergency Procedures

The Emergency Coordinator must provide for the treatment, storage, or disposal of any recovered waste, contaminated soil or surface water, or any other material that resulted from a spill/release, fire, and/or explosion at the facility. The Environmental Manager prior to treatment, storage, and disposal of such waste must review all waste treatment, storage, and disposal activities. The Environmental Manager will determine the proper Treatment, Storage, and Disposal Facility (TSDF) for off-site treatment, storage, and disposal.

# QSI

The Emergency Coordinator must ensure that, in the affected areas of the facility:

- 1) No waste that may be incompatible with any released material is treated or stored until cleanup procedures are completed; and
- 2) All emergency equipment listed in this plan is cleaned and prepared for its intended use.

The Emergency Coordinator, in conjunction with the Corporate Environmental Manager, must notify the Regional USEPA Administrator and appropriate State and Local Authorities, that the facility is in compliance with 1) and 2) above, before operations are resumed in the affected areas.

The Emergency Coordinator must note in the facility operating record the time, date and details of any incident that required implementation of this Contingency Plan. Within fifteen (15) days after the incident, the Emergency Coordinator must submit a written report to the USEPA Regional Administrator and the West Virginia Division of Environmental Protection. This report must include the following:

- 1) Name, address, and telephone number of the Company;
- 2) Name, address, and telephone number of the Facility;
- 3) Date, time, and type of incident (e.g., fire, release, etc.);
- 4) Name and quantity of material involved;
- 5) Extent of injuries, if any;
- 6) Assessment of actual or potential hazards to human health or the environment; and
- 7) Estimated quantity and disposition of recovered material that resulted from the incident.

## 9.0 Coordinating Activities

The Emergency Coordinator must contact the local police, fire, emergency response units, and hospital to familiarize them as follows:

- 1) The layout of the facility;
- 2) Road entrances to the facility;
- 3) Emergency evacuation routes;
- 4) Normally occupied work areas inside the facility; and

## QSI

- 5) Properties of hazardous materials and hazardous wastes handled at the facility, associated hazards, and types of injuries and/or illness that could result from fires, explosions, or releases of the materials or wastes.

The Environmental Manager will ensure that this contingency plan is sent to the local police, fire, emergency response units, and hospital either by Certified Mail, Return Receipt Requested, or by personal delivery.

The Emergency Coordinator shall keep copies of the transmittal cover letter and either the Return Receipts or acknowledgment of receipt letters on file with this Contingency Plan.

# QSI

## 10.0 Critical Procedures to Carry Out Before Evacuation

### **Communications**

The Emergency Coordinator shall designate a Communications Monitor who shall monitor the telephone until emergency responders arrive.

If there is no danger to remain in the main office, the Communications Monitor shall:

- monitor the telephone from the main office;
- go to the designated emergency evacuation area upon arrival of the emergency responders.

If it is dangerous to remain in the main office, the Communications Monitor shall:

- record an announcement with an alternate contact number;
- immediately go to the designated emergency evacuation area.

### **Equipment**

The Emergency Coordinator shall direct the movement of equipment, if necessary.

### **Account for all Evacuated Employees**

The Emergency Coordinator shall account for all the employees at the designated Evacuation Assembly Area (area outside the fence at main entrance) and report to the Fire Chief, on his arrival, if all are accounted for or not. The facility is normally occupied 7:00 am to 11:30 pm Monday through Friday.

### **Preferred Means of Reporting Emergencies**

- 1) Fire and explosion emergencies will be reported to the 911 emergency response service, which will notify the Police, Fire Department, and Ambulance, as needed.
- 2) Other emergencies shall be reported according to their nature in accordance with this contingency plan.

# QSI

## 11.0 Emergency Contacts Directory

### Local

Police Department	Kanawha County Police Department (304) 357-0191 PO Box 75087 Charleston, WV 25375
Fire Department	Nitro Fire Department (304) 755-0777 20th Street & 2nd Avenue Charleston, WV 25143
Ambulance	Same as Police (304) 357-0191
Hospital	Thomas Memorial Hospital (304) 766-3601 4605 MacCorkle Avenue S.W. South Charleston, WV 25309
LEPC	Kanawha County Emergency Services 409 Virginia Street East #301 (304) 357-0111 Charleston, WV 25301

### State

State Police Department	(304) 746-2100
West Virginia Division of Environmental Protection	(800) 642-3074

### National

USEPA National Response Center	(800) 424-8802
USEPA Region 3 (Philadelphia)	(215) 597-9800

### Corporate

Regional Manager Tim Perry	Office Pager Home	(910) 299-1259 (800) 910-8789 (910) 665-1695
Safety Manager Steven R. Shoemaker 102 Pickering Way Exton, PA 19341	Office Pager Home	(610) 363-4401 (800) 591-7284 (610) 942-4360
Environmental Manager James A. Rakitsky 102 Pickering Way Exton, PA 19341	Office Pager Home	(610) 363-4284 (800) 513-6545 (610) 353-1319

# QSI

## Approved Spill Response Contractors

Weavertown Environmental Group  
PO Box 713  
Charleston, WV 25323

(800) 746-4850

Clean Harbors, Inc.  
3260 Homeward Way  
Fairfield, OH 45014

(513) 874-5888

OHM Remediation Services Corporation  
1508 Fauver Road  
Glen Allen, VA 23060

(804) 262-0079

# QSI

## 12.0 Facility Hazardous Waste Operations

### Description of Operations

Quala Systems Inc., a wholly owned subsidiary of Chemical Leaman Corporation, is a commercial cargo tank cleaning company which provides decontamination and washing services of bulk transportation equipment. Quala Systems cleans empty cargo tanks, such as tank trailers, International Organization for Standardization tank containers, and portable mini-bulk storage tanks (intermediate bulk containers or totes), which have previously contained products, materials, or wastes, that have been transported over public highways. Quala Systems operates numerous cleaning facilities located throughout the continental United States.

Waste is generated primarily from the preparation of empty cargo tanks prior to initiating the actual washing process. The residual material in an empty tank, typically one to five gallons, is physically drained from the cargo tank into waste transfer containers at the Tank Cleaning Service Area. The residue is managed as a hazardous waste, if it meets either the definition of a listed hazardous waste or one of the four RCRA characteristics.

The Tank Cleaning Service Area includes the necessary equipment to safely access cargo tanks and has a concrete floor, which drains to a wastewater collection system. All residual material in the empty cargo tank is drained into waste transfer containers. Only wash and rinse water is allowed to enter the floor drains. Sometimes, steam, water, or solvents that are stored in closed 55-gallon drums are used to facilitate the removal of certain residual materials. Solvent generated waste is also containerized, and is not allowed to enter the floor drains.

Waste is then transferred to a 55-gallon drum for accumulation and subsequent storage. Hazardous waste is accumulated and stored at the Hazardous Waste Storage Area. The Hazardous Waste Storage Area is a contained, segregated concrete pad, located adjacent to, or near the Tank Cleaning Service Area.

A portion of the property, known as the Former Biocell Restricted Area, is under Post-Closure Care regulated by the West Virginia Department of Environmental Protection. This area is fenced, gated and locked. The Former Biocell Restricted Area does not contain any hazardous wastes, reactive, toxic, or flammable materials. The soils in this area represent no threat to persons or property in the event of an emergency elsewhere on the property. Access to this portion of the property is limited to those who are properly trained according to the Post-Closure Care Plan and familiar with the Post-Closure Care Plan.

### Typical Hazardous Wastes at the Facility

The facility provides cargo tank cleaning services primarily to the bulk chemical and waste transportation industry. Therefore, typical waste types generated will

## QSI

vary depending on the commodities transported by the facility's customers. Quala Systems does not clean cargo tanks that have previously transported DOT Class 1 (explosives), Class 2 (gases), Class 7 (radioactive substances), and infectious materials or wastes.

Many commodities commonly cleaned at the facility are ignitable, corrosive, or toxic. Flammable resins, solvents, corrosive solutions and toxic organic chemicals, such as alcohols, aniline, and phenols comprise the typical types of hazardous wastes generated at the facility.

A methylene chloride or ethylene glycol monophenylether based solvent is sometimes used to facilitate the removal of certain residual materials from empty cargo tanks. The waste generated from this process is toxic.

Additionally, the facility utilizes a caustic or sodium metasilicate based cleaning solution to wash the cargo tanks. Typically, residual solids from the caustic cleaning solution tank are a corrosive hazardous waste, due to a high pH.

Typically, about 5 to 15, 55-gallon drums of flammable waste, approximately 0 to 6, 55-gallon drums of flammable toxic and flammable corrosive waste, about 1 to 5, 55-gallon drums of toxic waste, approximately 1 to 10, 55-gallon drums of corrosive waste, and about 5-25, 55-gallon drums or Non-RCRA Regulated wastes, and one roll-off of Non-RCRA Regulated waste may be on-site at any particular time.



# QSI

## 13.0 Facility Emergency Evacuation Procedures

### Designated Evacuation Assembly Area

All personnel will assemble at the west gate entrance.

### Specific Escape Route Assignment

- Personnel in the **Cleaning and Service Building** shall exit the building through the closest exit and assemble at the front entrance gate as instructed herein:

#### Ground Floor

- 1) Personnel in the north side of the *Shop Area* shall exit through the north exit door and assemble at the designated evacuation assembly area (west gate).
  - 2) Personnel in the south side of the *Shop Area* shall exit through the south exit door and assemble at the designated evacuation assembly area (west gate).
  - 3) Personnel in the *Cleaning Service Area* shall exit the building through the southeast door and assemble at the designated evacuation assembly area (west gate).
  - 4) Personnel in the *Equipment Room* shall exit the building through the south exit door and assemble at the designated evacuation assembly area (west gate).
  - 5) Personnel in the *Cleaning Personnel Office* shall exit the building through the south exit door and assemble at the designated evacuation assembly area (west gate).
  - 6) Personnel in the *Boiler Room* shall exit the building through the southeast exit door and assemble at the designated evacuation assembly area (west gate).
- Personnel in the **Driver Comfort Center** shall exit the building through the west exit door and assemble at the designated evacuation assembly area (west gate).
  - Personnel in the **Water Treatment Laboratory** shall exit the building through the north exit door and assemble at the designated evacuation assembly area (west gate).

## QSI

- Personnel in the **Cleaning Personnel Locker Room** shall exit the building through the west exit door and assemble at the designated evacuation assembly area (west gate).
- Personnel in the **Office Building** shall exit the building through the north exit door and assemble at the designated evacuation assembly area (west gate).

# QSI

## 14.0 Emergency Equipment List

### Fire Extinguishing Equipment

TYPE	LOCATION	QTY.	DESCRIPTION AND CAPABILITIES
20 lbs ABC	Cleaning Building - at tank cleaning area near doors	4	All purpose portable fire extinguishers
20 lbs ABC	Cleaning Building Boiler Room - near doorway	1	All purpose portable fire extinguisher
10 lbs ABC	Cleaning Building Equipment Room	1	All purpose portable fire extinguisher
10 lbs ABC	Cleaning Building Motor Control Room	1	All purpose portable fire extinguisher
10 lbs ABC	Cleaning Building Personnel Office	1	All purpose portable fire extinguisher

### Personal Protection Equipment

TYPE	LOCATION	DESCRIPTION AND CAPABILITIES
Full-face Respirator	Cleaning Building Personnel Office	Respirator (air purifying filters) for acid gases; ammonia; carbon monoxide; formaldehyde; organic vapors; and particulate matter.
Protective Equipment	Office Building	PVC Jackets, PVC Pants, PVC Gloves, PVC Boots, Face Shields, Chemical Goggles, Safety Glasses, Tyvek® Suits, and Fall Protection Harnesses.

### Medical Aid Equipment

TYPE	LOCATION	DESCRIPTION AND CAPABILITIES
First Aid Kits	Cleaning Building Personnel Office; Cleaning Building Service Area (east); Cleaning Building Service Area (west); Water Treatment Laboratory; Cleaning Building Equipment Room	First Aid Supplies
Fire Blanket	Cleaning Building Personnel Office	Fire Blanket

### Spill Control Equipment

TYPE	LOCATION(S)	DESCRIPTION AND CAPABILITIES
RCRA Accumulation Area	Concrete pad near Cleaning Service Area	Contained concrete pad structure with segregated storage cells.
Absorbent Material	RCRA Accumulation Area	To absorb and dike spills.
55-gallon 17H Drums	RCRA Accumulation Area	To store spilled product and hazardous waste.
Over-Pack Drums	RCRA Accumulation Area	To over-pack damaged 55-gallon drums, and to store spilled product and hazardous waste
Shovels	RCRA Accumulation Area	Non-sparking
Absorbent Pads	RCRA Accumulation Area; Water Treatment Laboratory	To absorb and dike spills.

# QSI

## Communications and Alarm

TYPE	LOCATION(S)	DESCRIPTION AND CAPABILITIES
Emergency Alarm Siren	Cleaning Building Equipment Room and Service Area; Water Treatment Area	Pull boxes for emergency or accident signal
Fire Alarm Siren	Cleaning Building Equipment Room and Service Area; Water Treatment Area	Pull boxes for fire signal.
Portable Air Horn	Cleaning Building cleaning bays	For confined space entry emergency.

## Decontamination Equipment

TYPE	LOCATION(S)	DESCRIPTION AND CAPABILITIES
Emergency Shower & Eye Wash	Cleaning Building Equipment Room and Service Area	6 - high volume quick pull activated Environmental Control Unit permanently mounted shower units with aerated high flow, low pressure, push valve operated eye wash units.
Process Water Storage Tanks	Cleaning Building Equipment Room and Service Area	2 Kelton Units with high pressure, high volume output pumps, 600 psi water delivery capability
Process Steam System	Cleaning Building Service Area	Facility's boiler system operating at 85 to 100 psi provides high temperature steam capability.

**ATTACHMENT 4**

**GROUNDWATER MONITORING PLAN**

48" DRAIN PIPE CONTAINING  
RUN-OFF FROM MOUNTAIN

QUALAWASH  
FACILITY

DRUM AND SOIL  
EXCAVATION

MW-104

MW-105

MW-106

MW-101

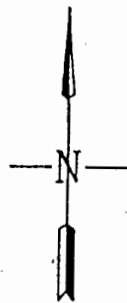
MW-103

MW-102 TREATED  
SOIL STOCKPILE

CHAIN LINK FENCE

ROUTE 25

FORMER  
BIOCELL AREA



— RUN-ON CONTROL DITCHES  
▲ PROPOSED MONITORING WELL LOCATION  
MW-101

600 — TOPOGRAPHIC CONTOUR LINE

100' 0 100'  
SCALE IN FEET

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INSTITUTE, W.VA

SITE MAP SHOWING PROPOSED  
MONITORING WELL LOCATIONS

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date 01/13/98	date 1/14/98	date	1-2B-1
job no. 01-1408-00-1140-000	file no. 01140-002-A		

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### *E-3 General Hydrogeologic Information*

There has been no previous groundwater monitoring data collected or subsurface drilling conducted around the three areas at the site. Based on the known site conditions, groundwater is expected to occur at a depth of approximately 20 feet below grade within the soils above bedrock. Because the topography, expected soil stratification, and bedrock fractures trend mainly south toward the Kanawha River south of the site, groundwater is expected to flow south.

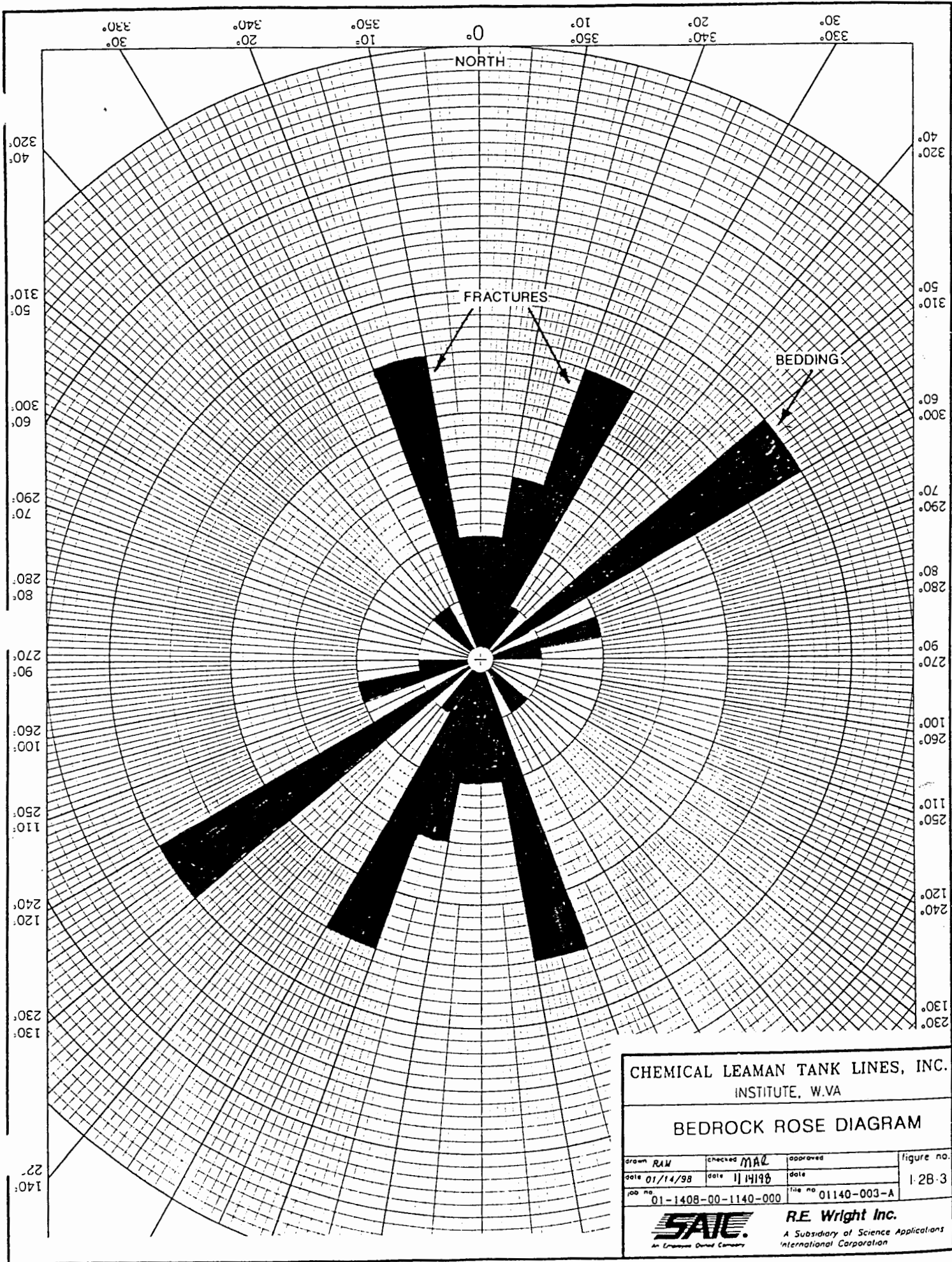
#### *Soils*

The soils present at the site consist of silty and sandy clays which were formed partially from the weathering and downslope movement of the sandstone and shale bedrock. Kanawha river terrace deposits may also be present. Either mechanism for soil formation is capable of creating a stratification of fine and coarser-grained soils in the soil horizons. Soil thickness on top of rock is estimated at 20 feet, based on work in similar localities.

#### *Geology*

The portion of West Virginia in which the site is located is part of the unglaciated Appalachian Plateau Physiographic Area. The bedrock on-site is believed to be comprised of the Kanawha formation of the Pottsville Group. This rock unit is composed of alternating beds of siltstone, sandstone, and shale commonly containing plant debris, coal, and occasionally thin limestone beds. The bedrock is resistant to weathering and has a well developed blocky fracture pattern, which has moderate porosity and permeability.

The structure of the bedrock was measured in outcrops on-site to observe the patterns of both bedding and fractures which influence soil depth and fluid flow in bedrock. A polar plot (Figure I-2b-3) illustrating fracture orientation and relative degree of development suggested by frequency of the measurements is indicated on the plot by a



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### BEDROCK ROSE DIAGRAM

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job no.	000-040-00-8041-10	file no.	<b>A-300-00-003</b>

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radial scale. The bedding strike (intersection of bedding planes with the horizontal) was measured to be generally north 55 degrees east with a dip of 2 degrees to 13 degrees south. Two main fracture trends were measured: north 2 to 32 degrees east and north 10 to 20 degrees west. Both fracture sets were nearly vertical.

A review of aerial photographs was conducted to identify large scale regional features, such as valleys and streams, which indicate fracture trends. The results of the aerial photograph review confirmed the on-site measurements of a pair of fracture patterns (north-northeast/south-southwest and north-northwest to south-southeast). In particular, a large scale fracture trace (a lineal tone pattern recognized on black and white aerial photography) trends north-northwest to south-southeast across the site passing just north of the QualaWash building.

Topography, soil stratification, and bedrock fracturing are expected to control groundwater occurrence and flow. Generally, groundwater flow mimics topographic slope unless directed by fractures or soil structure. Fractures are the presumed main conduit for groundwater flow in bedrock, and the soils formed in place tend to retain the fracture pattern of the parent rock. The locations of the five groundwater monitoring wells were chosen based on the observed fracture patterns and presumed direction of groundwater flow.

#### *E-6a Description of Wells*

Proposed well MW-101 will be the first to be installed. It will be located north of the former biocells and will indicate the background quality of groundwater flowing into the areas of interest. MW-102 will monitor the groundwater quality as influenced by the treated soil stockpile by being located south of that area. MW-103 and MW-104 will be located south of the former biocells. MW-105 will be south-southeast of the former drum removal area and on the trend of bedrock fracturing observed in the aerial photographs. MW-106 will be between MW-103 and MW-105, south southwest of the former drum removal area.

All drilling will be performed under the R.E. Wright January 1998 Health and Safety Plan (HASP) by a certified monitoring well driller who meets the requirements outlined in DEP Monitoring Well Regulations 47 CSR 59. This driller will be on-site during all drilling activities and will have proof of certification available for inspection at all times while on-site.

### *Drilling*

Groundwater beneath the site is anticipated to occur in soil at less than 20 feet below grade level (bgl). The monitoring wells will be advanced to a depth equal to the zone of saturation or the first water-bearing zone and will be continued to 10 feet below the anticipated groundwater surface. On the basis of these estimates, each of the monitoring wells will be installed to a total depth of approximately 30 feet bgl. However, actual site conditions may alter the monitoring well depths.

The proposed drilling method is hollow stem auger (HSA) with augers having a minimum inside diameter (ID) of 6 inches. If the groundwater table is intercepted prior to encountering bedrock refusal, the monitoring well will be constructed to the top of bedrock. However, should bedrock refusal be encountered during drilling prior to intercepting the groundwater table or result in insufficient length of saturated screen (<5 feet), a contingency has been prepared to complete the drilling in bedrock as detailed in the subsequent section.

A boring log will be produced and shall include, but not be limited to, the physical properties of the soil penetrated, the PID readings with depth, blow counts during the split spoon sampling, the presence and depth of groundwater, and well construction details.

### *Bedrock Drilling Contingency*

If bedrock refusal is encountered during the drilling of the monitoring wells and no groundwater is encountered or the saturated screen length is less than 6 feet, the

drilling method will be changed to air rotary drilling methods to complete the borehole. A 5-7/8-inch nominal diameter air rotary bit will be used to advance the borehole from the end of the HSA to the total depth. The construction of the well will be altered to a multi-level monitoring well, which is detailed under the bedrock well construction contingency section.

### *Soil Handling*

All soils produced during drilling will be stockpiled on and covered with polyethylene sheeting at a location designated by the facility manager. A composite soil sample will be obtained from the monitoring well soil stockpile for analysis for VOCs and SVOCs by a DEP-certified laboratory via EPA methods SW-846 8260 and SW-846 8270, respectively. Upon receipt of laboratory results of soil stockpile samples, they will be evaluated relative to the DEP Land Disposal Requirements (LDRs). Demonstration that the soil stockpile samples meet the LDRs indicates that the soil can be reused on-site by combining them with the treated soil stockpile and seeding to prevent erosion. If a soil stockpile composite contains concentrations which exceed DEP Land Disposal Requirements (LDRs), it will be disposed of at an off-site permitted facility, and the required transport and disposal documentation will be provided.

### *Decontamination*

A temporary decontamination area shall be constructed between the former drum and soil excavation and the former biocell locations. This area shall be covered with reinforced polyethylene sheeting and graded to collect all of the decontamination liquids and particulates produced from the decontamination of the drill rig and the drilling tools.

Before initial use and prior to moving to a new drilling location or leaving the site, the drill rig and all drilling tools will be decontaminated in the decontamination area using

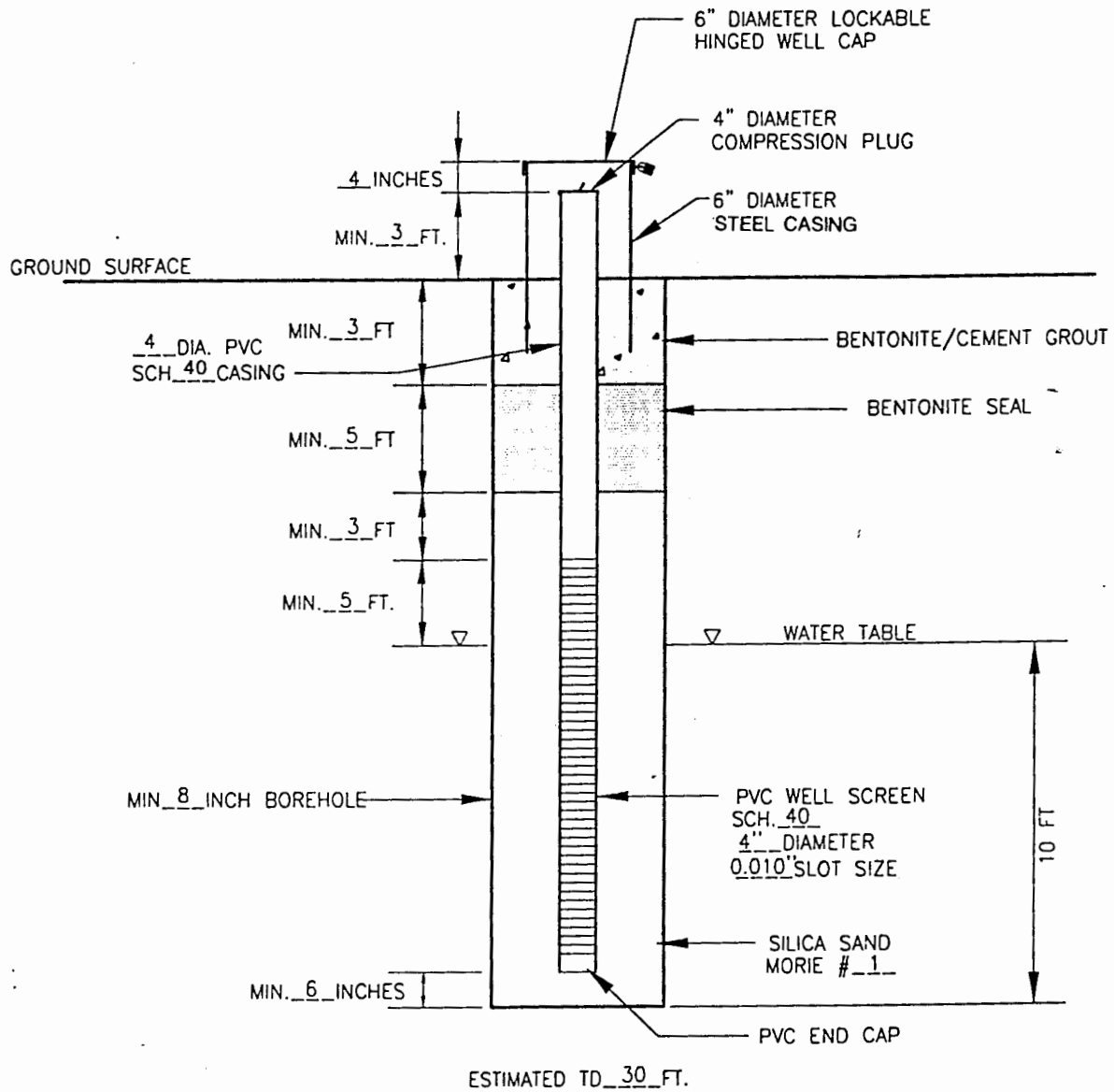
detergent and tap water applied by steam cleaner. Upon completion of steam cleaning, the augers and tools shall be inspected to assure they are free of all particulates and residue and rinsed with deionized water.

All water generated during the decontamination process will be contained and a composite sample collected for analysis. The composite sample will be analyzed by a DEP-certified laboratory for VOCs and SVOCs using EPA Methods SW-846 8260 and SW-846 8270, respectively. Upon receipt of the results of the laboratory, CLTL will evaluate the possibilities of disposing of the water through the on-site QualaWash water treatment system. If the water cannot be treated by QualaWash, it will be disposed of off-site at a permitted facility. The soil/rock particulates generated during decontamination activities will be dewatered and combined with the soil pile produced during drilling prior to sampling.

#### *Well Construction*

Upon completing the soil boring to the total depth, the construction of the monitoring well will commence. Each monitoring well, with the exception of MW-105, shall be constructed per the specifications shown on Figure I-2b-4. MW-105 shall be constructed per the specifications shown on Figure I-2b-5. The only difference between MW-105 and the other wells is that MW-105 will be capped with a flush-mounted protective cover rather than a protective riser pipe because MW-105 is in a traffic area.

The monitoring wells shall be constructed using 4-inch-diameter Schedule 40 polyvinyl chloride (PVC) threaded well screen and casing. The base of the well screen shall be capped with a 4-inch threaded PVC cap. The well screen shall have a #10 slot size and shall extend from 6 inches above the total depth of the boring to a depth of 5 feet above the groundwater table. The well casing shall be threaded to the well screen and shall bring the well to grade. A Morie #1 grade silica sandpack shall extend from the total depth of the well of the well screen to 3 feet above the top of the well screen. A 5-foot-thick bentonite pellet seal shall be placed in the annulus between the borehole



NOT TO SCALE

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MW-101 THROUGH MW-104 MONITORING  
WELL SPECIFICATIONS

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job no. <b>01-1408-00-1140-000</b>	file no. <b>01140-004-A</b>		

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and the riser pipe on top of the sandpack and hydrated with uncontaminated water from the facility. A bentonite-cement grout shall be placed in the annulus on top of the bentonite seal to three feet bgl. All protective casings and the flush-mounted protective cover will be concreted in place.

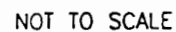
Each well, with the exception of MW-105, will be completed at grade by extending the 4-inch PVC well casing to a height of approximately 3 feet above the current grade level and capping with a 4-inch expandable compression plug. The PVC casing will be protected with a 6-foot section of 6-inch-diameter steel casing, which shall be concreted from 3 feet below grade to grade with a drainage apron around the casing. The protective casing will be capped with a lockable hinged cap and locked with a padlock, which is keyed the same as all of the wells. Each well will be protected from traffic by installing four concrete-reinforced bollards which will be painted yellow.


Since MW-105 will be installed in a traffic area, it will be completed at grade with a flush-mounted protective cover rather than a protective riser pipe. The PVC casing shall be cut 6 inches below the existing grade level and capped with a lockable 4-inch expandable compression plug. This compression plug will be locked with a padlock, which is keyed the same as all of the other wells. The flushmount cover shall be constructed of steel, 8 inches in diameter, and a minimum of 12 inches in length and held in place with a 2-foot square by 1-foot thick reinforced concrete pad. The cover of the flushmount will be painted white, identified as a monitoring well, and numbered.

After the well is constructed, the driller shall permanently affix the registration number onto each monitoring well installed in addition to completing the proper documentation required by DEP. DEP form GW-MWC will be completed and submitted within 60 days after the well has been installed.

#### *Bedrock Well Construction Contingency*

If bedrock refusal is encountered, the construction of the well will be altered to multi-level (nested) monitoring wells (Figure I-2b-6). The nested monitoring wells will



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BEDROCK MONITORING WELL SPECIFICATIONS			
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job no. <i>01-1408-00-1140-000</i>	file no. <i>01140-005-A</i>		
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be constructed within the borehole as two separate 2-inch-diameter monitoring wells, one shallow (designated "S") and one deep (designated "D"). Both wells will be constructed using 2-inch-diameter Schedule 40 PVC threaded well screen (#10 slot screen size) and casing. The base of the each well screen shall be capped with a 2-inch threaded PVC cap.

The deep well shall have #10 slot PVC screen which shall extend from the total depth of the boring (within the bedrock borehole) to a depth of either 5 feet above the groundwater table or 4 feet below the top of bedrock, whichever is deeper. The Schedule 40 PVC well casing shall be threaded to the well screen which shall bring the well to grade. A Morie #1 grade silica sandpack shall extend from 6 inches beneath the bottom of the well screen to 2 feet above the top of the well screen. A 2-foot-thick bentonite pellet seal shall be placed in the annulus between the borehole and the riser pipe on top of the sandpack and hydrated with uncontaminated water.

The shallow well screen shall extend from the top of bedrock to either a depth of 5 feet above the groundwater table or 4 feet below grade, whichever is deeper. The well casing shall be threaded to the well screen and shall bring the well to grade. A Morie #1 grade silica sandpack shall extend from the top of the deep wells bentonite seal to 2 feet above the top of the shallow well screen. A 1-foot-thick bentonite pellet seal shall be placed in the annulus between the borehole and the riser pipe on top of the sandpack and hydrated using uncontaminated water. A bentonite-cement grout shall be placed in the annulus on top of the bentonite seal to 3 feet bgl and the well completed with concreted protective casing or on-grade cover as specified.

During the drilling, soil samples will be advanced with 2-foot long split spoons by the standard penetration test method (ASTM D-1586-84) every five feet. The soils

penetrated and recovered will be logged and all blowcounts noted. Additionally, field screening of the soils for VOCs using a photoionization detector (PID) will be conducted. As part of the HASP, the breathing zone shall also be monitored for VOCs and the appropriate personal protection established based on the monitoring.

One soil sample from each soil boring will be collected from the soil/groundwater interface for laboratory analysis. The soil sample shall be contained in laboratory supplied glassware, labeled, refrigerated, and submitted to a DEP-certified laboratory under a appropriate chain-of-custody for analysis. Each soil sample will be analyzed for VOCs and semi-volatile organic compounds (SVOCs) via United States Environmental Protection Agency (EPA) Methods SW-846 8260 and SW-846 8270, respectively.

### *Surveying*

The contractor shall survey and map the horizontal and vertical locations of all of the newly installed groundwater monitoring wells and the corners of the soil stockpile relative to site features and buildings. The latitude and longitude coordinates in degrees, minutes, and seconds to the nearest second must be reported for each well and each corner of the soil stockpile along with the method used to determine the coordinates. The top of the north side of each monitoring well's internal PVC casing and ground level will be surveyed to 0.01 foot vertical accuracy. All elevations shall be referenced to an arbitrary on-site datum.

### *Well Development*

Each well shall be developed to remove sediment produced during the drilling of the well and establish communication with the surrounding aquifer. Development shall be completed using the surge and purge method. The surging shall be accomplished by using a surge block. A pump will then be used to remove the groundwater within the well. The groundwater level in the well will be allowed to recover, and the process will be repeated until the groundwater being removed is free of sediment.

All water produced during well development activities shall be contained in a MTL, Inc., tanker and stored at a location designated by the facility manager. Upon receiving the results of the initial groundwater samples, the contained water will either be discharged on-site, treated using the QualaWash water treatment facility, or disposed of at a EnviroPower-approved facility.

## **Groundwater Sampling**

### *Sampling Schedule*

Groundwater samples will be analyzed for VOCs and SVOCs. The groundwater within the monitoring wells (MW-101 through MW-106) will be sampled and reported to DEP quarterly for the first six consecutive quarters following the wells installation and semi-annually thereafter until closure is granted. The initial groundwater sampling will take place at least two weeks after the wells have been developed in order to allow the aquifer around the wells to stabilize.

### *Sampling Methods*

In completing the sampling, the following methods will be used. The field sample log shall be utilized to document methods and observations.

Prior to commencement of groundwater sampling, the groundwater surface in the monitoring wells will be gauged for the presence of non-aqueous phase liquids (NAPL), depth to static water level (SWL), and total well depth. Using the SWL measurements, the volume of water in the monitoring well will be calculated, and a volume of water equal to at least three times the standing well volume will be purged from the well using either a decontaminated submersible pump or dedicated hand bailers. All equipment entering the well must either be new and dedicated to the well or decontaminated using a steam cleaner with detergent and deionized water rinse. All purge and decontamination water generated will be contained in a MTL tanker, sampled, and discharged on-site, treated at the Quala Systems, Inc., water treatment system, or disposed of at an EnviroPower-approved facility. The laboratory results from initial sampling will dictate the disposal of the purge water from subsequent samplings.

Groundwater sampling will be conducted after the purging and only after the groundwater levels have recovered to within 75 percent of the pre-purged groundwater levels. No sample will be collected if the presence of NAPLs is determined.

Groundwater samples will be collected by using a new dedicated weighted plastic polyethylene disposable bailer with a ball check valve. The bailer will be lowered, filled, raised, and emptied to waste three times before commencement of any sample collection. One water sample will be collected from each monitoring well. Samples will be contained within laboratory-supplied glassware containing the appropriate

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preservative for the specified analysis and refrigerated immediately.

#### *Quality Assurance/Quality Control Procedures*

All samples will be appropriately labeled and documented under a chain-of-custody and field logs prepared for each day's sampling at the site. The samples will be transported with one trip blank to the DEP-certified laboratory. In addition, one blind duplicate and one quality assurance/quality control (QA/QC) field blank will be collected. The duplicate will be chosen at random and labeled MW-107, but the actual number of the wells being duplicated will be noted in the sample log. The field blank will be collected by pouring deionized water supplied by the laboratory through a dedicated plastic polyethylene disposable bailer prior to use in the wells. Analysis of VOCs and SVOCs will be completed using standard EPA Methods 8260 and 8270, respectively. Additionally total lead and total organic carbon (TOC) will be analyzed using EPA methods 7421 and SW 9060M respectively. The duplicate will be subjected to all parameter analysis and field tests, while blanks will only be analyzed for SVOCs. Field measurements of pH and conductivity will also be measured from each well sample.

#### *E-6d Statistical Analysis of Data*

Annual statistical analysis of the groundwater sampling results will be conducted. The

statistical analysis method will be the Parametric Analysis of Variance (ANOVA). An ANOVA analysis will be performed on each compliance well for each detected compound and will be compared to the statistical analysis performed on the background well.

### **Abandonment of the Wells**

Upon demonstrating that the groundwater VOC and SVOC concentrations meet attainment goals as described in the sampling schedule, the monitoring program will be deemed complete. Thereafter, the wells shall be abandoned per the DEP regulations. The DEP must give approval in writing prior to completing the well abandonment activities, and all well abandonments will be performed by a certified monitoring well driller who meets the requirements outlined in DEP Monitoring Well Regulations 47 CSR 59. The licensed driller will be on-site during all abandonment activities and must have proof of certification available for inspection at all times while on-site.

**ATTACHMENT 5**  
**POST-CLOSURE PLAN**

## Section B Facility Description

The property located on the North side of Route 25 in Institute, West Virginia, where the former biocells were located is owned by Chemical Properties, Inc. Chemical Leaman Tank Lines, Inc. (CLTL) operated a liquid bulk truck terminal and Quala Systems, Inc. (QSI) operated a tank truck wash facility on the property. Other tenants periodically leased portions of the property to operate truck terminals. CLTL, QSI and Chemical Properties, Inc. are wholly owned subsidiaries of Chemical Leaman Corporation. CLTL took the lead in remediating this site and used EnviroPower, Inc., also a wholly owned subsidiary of Chemical Leaman Corporation, as its authorized representative and environmental consultant in this matter.

In August 1998, Chemical Leaman Corporation and all its subsidiaries were purchased by Palestra Acquisition Corporation. MTL, Inc. the parent company of Montgomery Tank Lines was also purchased by Palestra Acquisition Corporation. MTL, Inc. and Chemical Leaman Corporation were merged together, with MTL, Inc. acting as the platform company. Chemical Leaman Corporation and its subsidiaries continue to operate as subsidiary companies under MTL, Inc. At this time, QSI continues to operate a tank truck wash facility and Montgomery Tank Lines is a tenant on the property. CLTL no longer operates a truck terminal on the property, but remains in management of the Post Closure plan for the former biocell area. The owner of the property remains Chemical Properties, Inc. EnviroPower, Inc. remains the representative and environmental consultant in this matter.



I-2c      Maintenance Plan:

Based on the results of the inspections conducted (outlined in the Inspection Plan [I-2a]), the following corrective actions will be taken:

1.    *Repair of security control devices:* The fencing will be repaired as necessary to prevent unauthorized access to these areas. Signs will be replaced if the lettering becomes faded.
2.    *Erosion damage repair:* All erosion features will be remediated by either installing additional silt fencing or by filling and compacting the erosion feature and re-seeding the area to promote grass growth. If erosion continues at the same area over consecutive inspections the area will be re-graded and re-seeded to eliminate the erosion.
3.    *Correction of settlement, subsidence, and displacement:* Any area which has settled, subsided, or displaced shall be filled, compacted, and seeded as necessary to preserve a uniform surface.
4.    *Mowing, fertilization and other vegetative cover maintenance:* The vegetation will be mowed as needed to prevent the growth of deep-rooted plants. If vegetation fails to grow at a given location, the soil will be tilled, fertilized, and reseeded as required in order to promote the growth of vegetation.

5. *Repair of run-on and run-off control structures:* Any silt fence or soil berm which has been breached or damaged will be replaced as necessary with new silt fence or a newly constructed soil berm.
6. *Leachate collection/detection and removal system:* Not Applicable.
7. *Gas venting system:* Not Applicable.
8. *Well condition:* The well casing, driveover cover, and protective bollards will be painted as necessary to promote visibility and prevent damage. Any damaged well exterior casing which effects the integrity of the inner casing will be removed and replaced. All rusted locks will be either oiled or replaced.
9. *Benchmark integrity:* Not Applicable.

The equipment to be used to complete the above-mentioned tasks shall consist of standard industrial, commercial, or farming equipment which is suited to complete the task. All workers shall comply with the January 1998 Health and Safety Plan for Bioremediation Post-Closure Plan which has been submitted to the West Virginia Department of Environmental Protection (DEP) under separate cover.

I-2f      Post-Closure Security:

The three areas of investigation (former drum and soil excavation, former biocells, and treated soil stockpile) all have been sampled extensively during previous investigations. The results of the previous investigations have been submitted to DEP and have

demonstrated that all of the soils remaining on-site contain concentrations of all Appendix IX constituents which are below the West Virginia Land Disposal Regulations (LDRs). Therefore, no hazardous waste will remain exposed after the completion of the final closure as a result of the drum removal and soil remediation. The integrity of the treated soil stockpile surface will be maintained with no disturbance allowed.

I-2g      Post-Closure Contact:

Mr. Roy Peterson  
EnviroPower, Inc.  
102 Pickering Way  
Exton, PA 19341-0200  
Telephone: (610) 363-4498  
Facsimile: (610) 594-2865

**Section F: Procedures to Prevent Hazards**

As a means of limiting access to the former biocells portion of the property, a combination of artificial and natural barriers will be used. The north side of the former biocells area is bordered by a natural barrier, a steep rocky hill, that would eliminate access by unauthorized personnel or livestock. On the eastern, western, and southern portions of the property, a fence in good repair will act as the barrier.

A locked gate will be installed as part of the fencing system along the western border of the former biocell area to control access from the rest of the property. Warning signs stating, "Danger - Unauthorized Personnel Keep out" will be posted at the entrance gate. The facility manager will retain custody of the gate key with regular inspections conducted

as stated in Section (I-2a "Inspection Plan"). Only persons trained per Section H will be permitted to enter the fenced area.

#### **Section G: Contingency Plan**

The Contingency Plan for Quala Systems, Inc., the primary occupant of the property, is attached as Appendix D. If any material from the facility should enter the fenced area, the Contingency Plan should be followed and the emergency environmental coordinator contacted.

#### **Section H: Personnel Training**

All persons whose job responsibilities will include well installations or groundwater monitoring within the secure former biocell area will be trained on an annual basis according to the guidelines of 29 CFR 1910.120(e) Hazardous Waste Operations and Emergency Response (known as 40-Hour HAZWOPER Training) with the necessary 8-hour annual refresher training.

#### **I-6 Post-Closure Cost Estimate:**

The following table outlines the estimated costs, in current dollars, to perform the post-closure monitoring and maintenance of the three areas (former drum and soil excavation, former biocells, treated soil stockpile) for a period of 30 years. The cost table assumes that quarterly groundwater sampling will be conducted for 6 quarters initially following the well installations and semiannually thereafter for a total of 10 years of monitoring (total of 23 sampling events).

	Cost per event	Number of events	Total Cost
Monitoring well installation	\$ 22,300	1	\$ 22,300
Surveying	\$ 1,600	1	\$ 1,600
Monthly inspections	\$ 100	360	\$ 36,000
Annual maintenance costs	\$ 1,000	30	\$ 30,000
Sampling Events and reporting	\$ 9,230	23	\$ 212,290
Well abandonment	\$ 6,300	1	\$ 6,300
Estimated Costs			\$ 308,490

#### I-7 Financial Assurance Mechanism for Post-Closure Care

Attached as Appendix E is a copy of the Financial Test and Corporate Guarantee for Post-Closure Care.

#### I-8 Liability Requirements

Attached as Appendix F is a Certificate of Insurance which demonstrates that CLTL meets or exceeds all liability requirements as stated in the regulations.